

Hydra Ink Supply System



XAAR TECHNOLOGY

The world's leading independent supplier of industrial printheads with a proven track record in designing the components for productive, flexible and cost-effective inkjet machines.

APPLICATIONS

Xaar offers a variety of printheads to suit a range of applications providing companies the flexibility to choose the right printhead for their application. XaarDOT™ (Xaar Drop Optimisation Technology) encompasses a range of drop formation options, each with specific features. XaarDOT™ is incredibly flexible in giving customers the choice of what drop size or sizes and consequently the DPI to use for a job, both in terms of image quality and substrate flexibility. By tuning the options, printer manufacturers can produce small drops for anything from high quality photographic results for close-up viewing or larger droplets for high speed coverage on billboards or other signage.

INKS AND FLUIDS

Xaar's unique and patented 'through-flow' system provides an unparalleled level of quality, reliability and flexibility. Xaar's TF Technology™ provides excellent thermal control in the printhead, which provides exceptional operational latitude for a wide range of fluids, including compatibility with suspensions (e.g. high-solids white ink) and higher viscosity and elasticity inks.



XAAR®

SCALABLE INK SUPPLY SYSTEM

Expanding on our drive to make inkjet easy, we have developed the new Hydra Ink Supply System which is designed to fully integrate into an inkjet printing machine.

Hydra is a recirculating ink supply system designed to ensure optimal performance and reliability of 1001-based industrial printing machines.

It is fully supplied with all parts needed to run up to 4 printheads per system and includes special features such as:

- Precise nozzle pressure and ink flow rate control - ensuring reliable operation
- Precise temperature control - enabling a wide operating range of fluids
- Controlled shut down option (UPS) - preventing ink drying in the system in the event of power failure
- Provides interface for monitoring via a PC (or can be run stand-alone).

Every system comes fully supported by a documentation pack and onsite technical support from Xaar's applications team, to ensure rapid progression through the prototype and evaluation stages of product development.

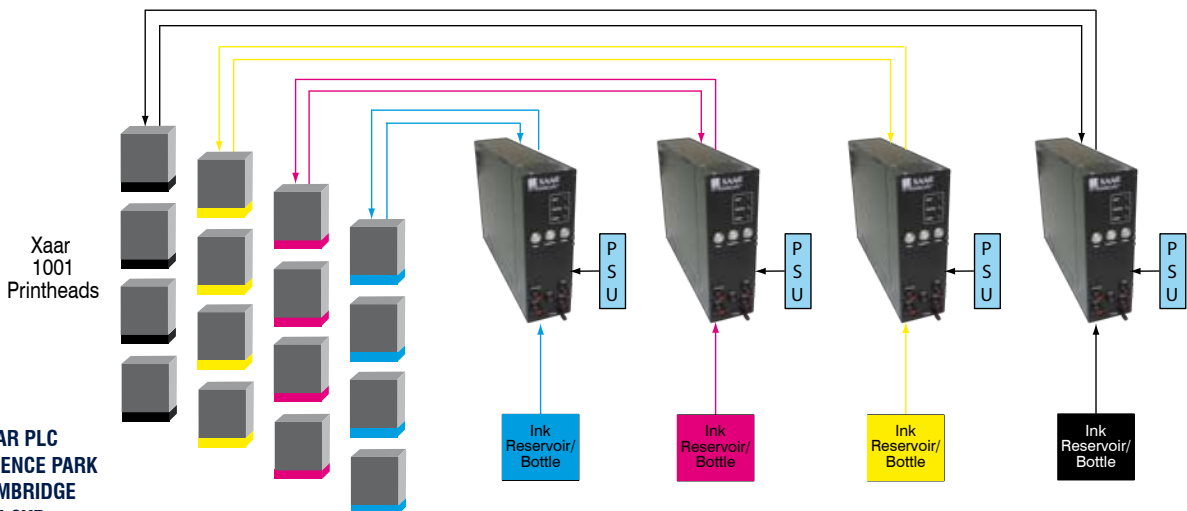


THE HYDRA INK SUPPLY SYSTEM has been developed to be used in a wide range of applications and to provide the widest possible flexibility and applicability. It supports a wide range of fluid types, viscosities and operating temperatures.

BENEFITS AND FEATURES

- Designed for easy integration
- Reduced time-to-market
- Scalability reduces R&D expenditure
- Full on-site support
- Can be run stand-alone or monitored through a PC
- Compact with small footprint

Features	Specification
Number of Printheads that can be fed per Hydra System	Up to 4
Printhead Orientation	Downshooter
Number of Hydra Ink Systems required	One for each fluid colour or type
Printhead Meniscus Pressure	-5mbar to -25mbar +/- 2mbar
Flow Rate	3:1 to 15:1
Fluid Temperature Range	Ambient - 50 °C +/- 0.5 °C
Fluid Viscosity (At jetting temperature)	7 - 25 cP
Built-in Filter	10 Microns - Field replaceable
Unit to Printhead Manifold Distance	4 meters as standard
Ink System Volume	1 litre (approx)
Typical Startup Time	~ 20 mins
Typical Shutdown Time	~ 4 mins
Connections	<ul style="list-style-type: none"> • Fluid input from fluid store (including level-sensor) • Fluid output to printheads and fluid input to system from printheads • Drip tray port • USB to Windows PC • Control Power • Uninterruptable Power Supply (UPS) • Heater Power
Software Control	Using supplied application.
Customer Supplied Hardware	<ul style="list-style-type: none"> • Windows PC to run controller software • Uninterruptable Power Supply (UPS)
Power (Volts)	110 or 230
ISS Dimensions (D x H x W mm)	477 x 389 x 110
PSU Dimensions (D x H x W mm)	400 x 310 x 120
Manifold Dimensions (D x H x W mm)	27 x 56 x 174



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